UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,218	09/19/2003	Ram Ayyakad	Ranch 5	7001

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EXAMINER
SMITH, MARCUS

ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
	10/667,218	AYYAKAD ET AL.
Office Action Summary	Examiner	Art Unit	
	Marcus R. Smith	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _19 September 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2 and 21-27_ is/are rejected.

7)☒ Claim(s) _3-20_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _19 September 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _9/19/03_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-2, 2⅓-27 are rejected under 35 U.S.C. 102(e) as being

anticipated by Krichevski et al. (US 6,944,670).

with regard to claim 1,

A single-pass packet processor for processing received packets

comprising:

a stateless segment (packet parser, 22) comprising at least one pipelined

plurality of stateless functional modules, each of said stateless functional

modules performing stateless processing of received packets (column 9, lines

32-58: The examiner views the stateless functional modules as a plurality of

predefine protocols to identified (mapping) and extract data from each packet.

Since the protocols are listed and check one by one, then it can consider the

protocols are in a pipeline.); and

a stateful segment (General state machine, 23) comprising at least one

pipelined plurality of stateful functional modules, each of said stateful functional

modules performing stateful processing of packets that have been processed by at least one of said stateless functional units (Column 9, lines 58-67 through column 10, lines 1-31: These actions on the packets are based on the session history.).

with regard to claim 2,

The single-pass packet processor of claim 1 further comprising a plurality of communications ports (ingress and egress gates, 11/21 and 15/27) for sending and receiving packets (column 7, lines 10-30).

with regard to claim 21,

The single-pass packet processor of claim 1 wherein at least one of said stateless functional modules in at least one of said pipelined plurality of stateless functional modules is implemented as an application specific integrated circuit (ASIC, column 5, lines 62-67 through column 6, lines 1-10).

with regard to claim 22,

The single-pass packet processor of claim 1 wherein at least one of said stateless functional modules in at least one of said pipelined plurality of stateless functional modules is implemented as a field programmable gate array (FPGA, column 5, lines 62-67 through column 6, lines 1-10).

with regard to claim 23,

The single-pass packet processor of claim 1 wherein at least one of said stateful functional modules in at least one pipelined plurality of stateful functional modules is implemented as a programmed processor (column 8, lines 5-11: the

device is implemented on network processor, which can be viewed as a

programmed processor.).

with regard to claim 24,

The single-pass packet processor of claim 1 wherein at least one of said

stateful functional modules in at least one pipelined plurality of stateful functional

modules is implemented as a programmed network processor (column 8, lines 5-

11).

with regard to claim 25,

The single-pass packet processor of claim 1 wherein at least one of said

stateful pipelined plurality of stateful functional modules is selectively enabled by

control signals applied to said single-pass packet processor (column 10, lines 53-

58: the examiners views that protocols are called in a specific routine or

(scenario), thus action handlers must have control signals enables (picking) a

certain protocol with an event.).

with regard to claim 26,

The single-pass packet processor of claim 25 wherein at least one of said

stateful pipelined plurality of stateful functional modules is implemented as a

coded module executed by said programmed network processor (column 10,

lines 59-67 through column 11, lines 1-5: The examiners views the protocol

definition stored on C data structures as coded modules.).

with regard to claim 27,

The single-pass packet processor of claim 1 wherein at least one of said

stateless pipelined plurality of stateless functional modules is selectively enabled

by control signals applied to said single-pass packet processor (Column 9, lines 15-35: the examiners views how in the pre processing stage, each protocol still is called by a certain routine. Thus, the packet parser uses some control signal to enable the predefined protocols it has selected.).

Allowable Subject Matter

3.   Claims 3-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

MRS 5/07/07

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